



# BENEFITS OF HIPAA COMPLIANT MESSAGING



# THE BENEFITS OF HIPAA-COMPLIANT MESSAGING

The Health Insurance Portability and Accountability Act – also known as HIPAA was passed by Congress in 1996. When it was passed, one of its major goals was to ensure the security and confidentiality of patient information and data. While the bill represented a significant change in thinking at the time, it wasn't until 2006 that the HIPAA laws mandated the safeguarding of protected health information (PHI) and strict control over when PHI can be divulged, and to whom.

It has taken several more years for institutions to realize that the need for safeguard PHI also pertains to messaging that healthcare officials exchange on messaging devices like pagers. While pagers have long been the default messaging device of healthcare, there has been the increased realization over the past several years that messaging must also fall under the umbrella of protected information. Upon further investigation, healthcare has realized that pagers not only put institutions in the position of potentially violating HIPAA statutes, they also:

- impede effective communications<sup>1</sup>
- lengthen hospital stay for patients<sup>2</sup>
- increase the expense of patient care<sup>3</sup>

Clearly, there are many reasons to switch from pagers to HIPAA compliant messaging. In this whitepaper, we will look into:

- Why pagers don't cut it
- What is required for HIPAA compliant messaging
- What are the benefits of HIPAA compliant messaging

## WHY PAGERS DON'T CUT IT

### RISK BROADCASTING SENSITIVE INFORMATION

The basic reason why pagers are ineffective for healthcare is because they run the risk of broadcasting sensitive patient information. In a specific case in North Carolina<sup>4</sup>, a nursing home facility used pagers to transmit a patient's lab results. Although the only authorized officials saw the message, the nursing home was slapped with an "e-level deficiency",<sup>5</sup> meaning there was no actual harm but potential for more than minimal harm.

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<sup>1</sup> <https://www.healio.com/internal-medicine/practice-management/news/online/%7Baf983133-df0b-4e9f-9e23-a65e801ab4e1%7D/text-paging-inefficient-for-communication-in-acute-care-settings>

<sup>2</sup> <https://www.pennmedicine.org/news/news-releases/2016/april/patients-had-shorter-hospital>

<sup>3</sup> <http://www.ponemon.org/local/upload/file/2014%20Imprivata%20Report%20FINAL%203.pdf>

<sup>4</sup> <http://www.informationweek.com/healthcare/security-and-privacy/insecure-communications-costly-for-hospitals/d/d-id/1297602>

<sup>5</sup> <http://www.sepalabs.com/insecure-communications-costly-for-hospitals/>

At issue was that pagers have no way for encryption so it could have easily been the case that the patient records could be viewed by unintended individuals. This result would have caused a serious financial penalty for the facility. Readers should not think that hacked pagers are a fantasy. In fact, an exhaustive study<sup>6</sup> carried out in 2016 showed just how easily pagers can be hacked by individuals looking to siphon off information.

In the study, researchers were able to siphon information that contained protected health information such as dates of birth and medical diagnoses. By simply using a \$20 apparatus, researchers were able to extract protected health information exchanged by pagers. If this data were leaked to an actual third party, hospitals would face huge HIPAA fines.

Attacks on patient data have risen by 125% in recent years and the average cost of a data breach is over \$2MM<sup>7</sup> to the hospital. Clearly, huge financial losses loom for healthcare organizations that inadequately secure patient data. So, the inability to secure patient data represents both a loss of privacy for the patient and a significant financial loss for the hospital.

### IMPEDE EFFECTIVE EXCHANGE OF INFORMATION

Beyond leaking sensitive information, pagers also impede the effective exchange of information. According to research put out in June 2017, “text paging has been identified as inefficient and disruptive, and even with implementation of novel technology, concerns about communication quality and safety persist.”<sup>8</sup>

Much of the fault for this inefficiency lies in the inability to fully exchange information through a pager. In order to remain HIPAA compliant, healthcare organizations cannot mention any personal identifiers in pager messages. As such, doctors and nurses inevitably need to page the recipient with a phone number and then follow up with a phone call. In addition to requiring healthcare workers to follow additional steps, the process also makes it take more time until the desired person can be reached.

### WHAT IS REQUIRED FOR HIPAA COMPLIANCE

The need for HIPAA compliant messaging has been spelled out. Failing to abide by HIPAA requirements can lead hospitals to face a significant financial loss. Given this reality, it is logical to ask what is needed for healthcare institutions to maintain HIPAA compliance? The statutes of the HIPAA security rule are as follow<sup>9</sup>:

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<sup>6</sup> <https://documents.trendmicro.com/assets/threat-reports/wp-leaking-beeps-healthcare.pdf>

<sup>7</sup> <http://www.beckershospitalreview.com/healthcare-information-technology/attention-risk-managers-3-reasons-you-need-to-focus-on-patient-privacy-and-2-things-you-should-do-right-now.html>

<sup>8</sup> <https://www.healio.com/internal-medicine/practice-management/news/online/%7Baf983133-df0b-4e9f-9e23-a65e801ab4e1%7D/text-paging-inefficient-for-communication-in-acute-care-settings>

<sup>9</sup> <https://www.hhs.gov/sites/default/files/privacysummary.pdf>

**CONFIDENTIALITY** – All messages exchanged that contain PHI must be SSL encrypted in transit and at rest.

**INTEGRITY** – The full message containing PHI can be viewed only by the receiver and the sender and cannot be altered. For enterprises – additional to Sender and Receiver, only authorized personnel Super Admin can view message content.

**AVAILABILITY** – All messages must be retained for 6 years.

**PROTECT AGAINST ANTICIPATED DISCLOSURES** – Message content cannot be compromised. As such, databases need to be located in a secure and compliant hosting facility. Additionally, enterprises need to be able to remote-wipe messages in case it gets lost or stolen

**WORKFORCE COMPLIANCE** – Every new employee gets trained regarding HIPAA rules upon joining the company

## WHAT ARE THE BENEFITS OF HIPAA COMPLIANT TEXTING

### AVOIDING HIPAA FINES

While obvious, the notion that HIPAA compliance is a virtue in and of itself cannot be overlooked. The impact of HIPAA fines inevitably goes back to the consumer who will be asked to bear the burden of increased costs for hospital visits as well as increased premiums for insurance.

### SECURITY OF PATIENT INFORMATION

Another obvious win from using secure messaging is that patients know their information will be secure and will not be compromised. 7 out of 10 people are likely to choose a hospital that hasn't been plagued with security issues.<sup>10</sup> So, knowing that their information is secure also lets patients know that they run less risk of potentially dealing with the theft and improper use of their healthcare records.

### BETTER PATIENT OUTCOMES

One of the main benefits of HIPAA compliant messaging is seen through the advantages they have in bettering patient outcomes. According to a study by the University of Pennsylvania<sup>11</sup>, “patients whose hospital care providers used mobile secure text-messaging as a means of communication had **shorter lengths-of stay** compared to patients whose providers used the standard paging system to communicate”. The results of the study further indicated that mobile secure text messaging may help to improve communication among providers leading to more efficient care coordination and allowing patients to leave the hospital sooner.

### BETTER DOCTOR AND NURSE COMMUNICATION

HIPAA compliant messaging allows for better care than pagers because the information exchanged on pagers does not come with any immediacy and thus do not provide a strong communications portal for hospitals. By contrast, a HIPAA-compliant messaging platform like the one provided by OnPage does let

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<sup>10</sup> <http://www.beckershospitalreview.com/healthcare-information-technology/attention-risk-managers-3-reasons-you-need-to-focus-on-patient-privacy-and-2-things-you-should-do-right-now.html>

<sup>11</sup> <https://www.pennmedicine.org/news/news-releases/2016/april/patients-had-shorter-hospital>

doctors and nurses know if the situation is urgent and thus lets them manage those situations with priority while letting non-urgent issues wait until later to be resolved.

At the same time, by using secure messaging, healthcare workers improve outcomes. Strong communications are central to care coordination and the proper communication tools and channels help providers communicate, collaborate and deliver care across the continuum.<sup>12</sup>

## CONCLUSION

Clearly, there are multiple advantages to switching to HIPAA-compliant messaging from insecure pagers or other forms of insecure messaging such as email or standard SMS. Healthcare institutions need to understand that by continuing their use of unsecured messaging platforms, they not only hurt their bottom line but inevitably hurt their patients.

## ABOUT ONPAGE

OnPage is a cloud-based, enterprise grade communication platform. We provide HIPAA compliant clinical communications that connect healthcare personnel through two-way messaging and critical alerting. Enhance clinical workflow through automated alert escalation and the digital scheduler that manages alerting during on-call shifts. OnPage helps improve patient care through better, intelligent communications.

TO LEARN MORE, VISIT OUR WEBSITE OR CALL: [ONPAGE.COM/CONTACT-US](http://ONPAGE.COM/CONTACT-US) 781-916-0040



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<sup>12</sup> <https://www.healio.com/internal-medicine/practice-management/news/online/%7Baf983133-df0b-4e9f-9e23-a65e801ab4e1%7D/text-paging-inefficient-for-communication-in-acute-care-settings>